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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/596,942	02/07/2007	Levent Akdag	PHDL0860-008	2629

26948 7590 07/13/2009

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EXAMINER	
KAMPS, FRANCES H	

ART UNIT	PAPER NUMBER
3743	

NOTIFICATION DATE	DELIVERY MODE
07/13/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@vclmlaw.com

Office Action Summary	Application No.	Applicant(s)	
	10/596,942	AKDAG ET AL.	
	Examiner	Art Unit	
	FRANCES KAMPS	3743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 May 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13,16 and 18* is/are rejected.

7)☒ Claim(s) *14,15 and 17* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 June 2006* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *02/07/2007*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The subject matter of this application admits of illustration by a drawing to facilitate understanding of the invention. Applicant is required to furnish a drawing under 37 CFR 1.81(c). No new matter may be introduced in the required drawing. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). On page 7 of the specification, the Applicant makes reference to Figures 2a and 2b. Figure 2b was not supplied

Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR *1.75(d)(1) and MPEP § 608.01(o)*. Correction of the following is required: In Claim 1, the Applicant claims "carrying the plates (A. B. C)", when this feature had not been previously been claimed. The claim should read "carrying plates (A. B. C)".

3. The attempt to incorporate subject matter into this application by reference to DE 19545993, DE29907113, and EP0695915 is ineffective because the reference document is not clearly identified, as required by 37 CFR 1.57(b)(2)). The reference numbers may be incorrect.

4. The incorporation by reference will not be effective until correction is made to comply with 37 CFR 1.57(b), (c), or (d). If the incorporated material is relied upon to meet any outstanding objection, rejection, or other requirement imposed by the Office, the correction must be made within any time period set by the Office for responding to the objection, rejection, or other requirement for the incorporation to be effective. Compliance will not be held in abeyance with respect to responding to the objection, rejection, or other requirement for the incorporation to be effective. In no case may the correction be made later than the close of prosecution as defined in 37 CFR 1.114(b), or abandonment of the application, whichever occurs earlier.

5. Any correction inserting material by amendment that was previously incorporated by reference must be accompanied by a statement that the material being inserted is the material incorporated by reference and the amendment contains no new matter. 37 CFR 1.57(f).

Claim Objections

6. Claim 15 has been placed with improper dependency on Claim 13. As written, Claim 15 recites the structure of the windows (28) and openings (18), which are part of Claim 14, not Claim 13. For the purposes of examination, Claim 15 is understood as being dependent on Claim 14.

7. Claims 1, 11, and 16 are objected to because of the following informalities: The Applicant interchanges "cooling chamber (3)" with "cooking chamber (3)". Appropriate correction is required. For the purposes of examination, the Claims are understood to mean "cooking chamber (3)"

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1 – 3, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goff et al (GB 2,105,459) in view of Baldan (EP 0 611 524).

10. **In re claim 1**, Goff et al ('459) discloses an oven (1) that comprises;

- an outer cabinet (fig 1; 5, 7),
- a cooking chamber (2) located inside the outer cabinet with spacing in between (13),
- one or more fans (17) moving the air inside the oven (1),
- one or more heater (19, 20) that heats the air,
- a fan cladding (4) located at the back of the cooking chamber (2) that directs the air moved by the fan (17) and characterized by one or more sidewall (11, 12) comprising an inlet (see fig 2 below; where panels (4) and (5) meet to form an inlet into the sidewall plenums at (11) and (12)) that

opens to the volume where the fan (9) is located (rear plenum defined between rear panel (4) and back outer panel (5)) and that lets inside the air moved by the fan (9) and,

- one or more duct (13) having one or more apertures (14, 14a) that provides to blowing air received from the inlet (see fig 2; where panels 4 and 5 meet to form an inlet into the sidewall plenums at (11) and (12)) at desired temperature (pg 1, lns 32 – 34) and pressure values, towards the middle and the back of the cooking chamber (2).

11. Goff et al ('459) lacks wherein:

- One or more bearing surface that carries plates is placed inside the cooking chamber.
- Blowing air is contacting the top and the bottom surfaces of one or more plate placed over the bearing surface.

12. Baldan ('324) teaches:

- One or more bearing surface (Fig 2; (17)) that carries plates (7) is placed inside the cooking chamber (6)
- Blowing air (fig 1: indicated by dashed arrows) is contacting the top and the bottom surfaces of one or more plate (fig 2; (7)) placed over the bearing surface (17). (In regard to the claim limitation that air is contacting the top and bottom of the plates, Baldan ('524) discloses this wherein the air delivery passages (12) create "forced air flow directed parallel to the shelves (plates) in a substantially uniform pattern... along the flow lines extending in horizontal planes, substantially without any vertical components" (col 3, lns 14 - 20)

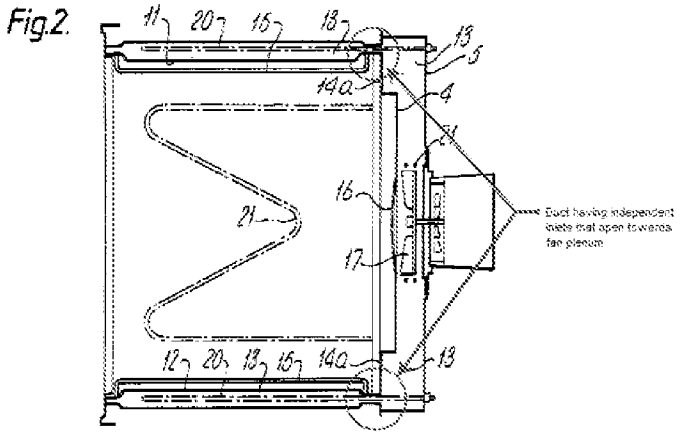
13. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include one or more bearing surfaces, carrying the plates inside the cooking chamber, such that blowing air is contacting the top and bottom surfaces of the plates in the oven of Goff et al ('459), as taught by Baldan ('324), for the purpose of increasing the capacity of the oven, by enabling the placement of multiple trays of food within the same volume, instead of just one tray, to increase the yield / quantity of cooked goods.

14. In regard to the claim limitation that one or more ducts provide blowing air at desired temperature and pressure values, the desired pressure of the air would be an inherent value of the desired temperature selected by the user.

15. **In re claim 2**, Goff et al ('459) discloses an oven (1) wherein the side wall (11, 12) comprises the duct (13) in a form extends inside the cooking chamber (2) and is located along the horizontal axis (from the rear panel (4) to the door (3)).

16. **In re claim 3**, Goff et al ('459) discloses an oven (1) wherein the side wall (11) comprises the duct (13) with apertures (14) (pg 2, lns 9 – 11) having equal shapes and dimensions. (In regards to the claim limitation that the apertures are equal shapes and dimensions, Goff et al ('459) is silent as to the aperture characteristics. However, figure 3 suggests to one of ordinary skill in the art that the side wall apertures (14) are of equal shape and dimension. (MPEP 2125))

17. **In re claim 6**, Goff et al ('459) discloses an oven (1) wherein the side wall (11, 12) comprises the duct (13) having independent inlets (see figure 2 below) that open towards the volume where the fan (17) located.



18. **In re claim 7**, Goff et al ('459) discloses an oven (1) characterized by the side wall (11, 12) comprises the duct (13) having inlets (see figure 2 above) connecting to each other (in the rear fan plenum) as they are open towards the volume where the fan (17) located.

19. **Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goff et al (GB 2,105,459) in view of Baldan (EP 0 611 524) as applied to claim 1 above, and in further view of Baggott et al (US 4,624,301**).

20. **In re claim 4**, Goff et al ('459) / Baldan ('524) disclose an oven (1) wherein the side wall (Goff et al ('459) (11)) comprises a duct (13) with apertures (14)

21. Goff et al ('459) / Baldan ('524) lack wherein the apertures have different shapes and dimensions.

22. Baggott et al ('301) teaches wherein the apertures (fig 2; (13)) have different shapes and dimensions, with apertures (13) having different dimensions as they get further away from the inlet (which is the portion of the cooking chamber that is closest to the fan (19)).

23. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include apertures have different shapes and dimensions as taught by Baggott et al ('301) in the oven of Goff et al ('459) / Baldan ('524) for the purpose of compensating for the progressive drop in air pressure in the plenum moving away from the fan, thereby providing for uniform distribution of heated air across the width of the cooking chamber, to ensure even cooking temperatures and cooked product quality.

24. **In re claim 5**, Goff et al ('459) / Baldan ('524) disclose an oven (1) wherein the side wall (Goff et al ('459) (11)) comprises a duct (13) with apertures (14)

25. Goff et al ('459) / Baldan ('524) lack wherein the apertures have different dimension as they get further away from the inlet

26. Baggott et al ('301) teaches wherein the apertures (fig 2; (13)) have different dimension as they get further away from the inlet (the portion closes to the fan (19))

27. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include apertures having different dimension as they get further away from the inlet as taught by Baggott et al ('301) in the oven of Goff et al ('459) / Baldan ('524) for the purpose of equalizing the discharge airflow out of the duct, into the cooking chamber, for the purpose of providing heat in a uniform manner

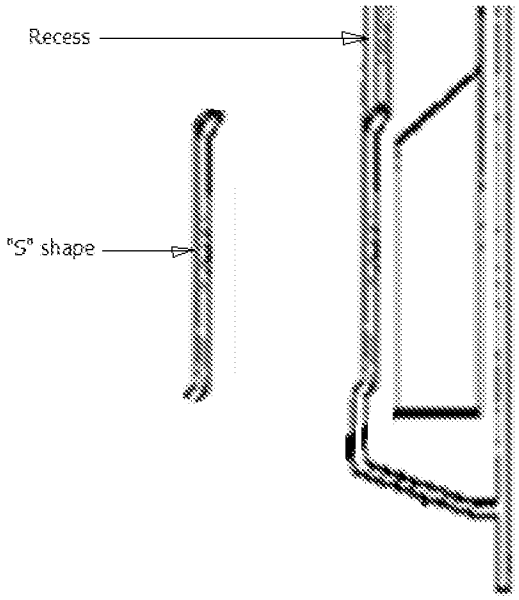
28. **Claims 8, 9, 11, 12, 13, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goff et al (GB 2,105,459) in view of Baldan (EP 0 611 524) as applied to claim 1 above, and in further view of Austin et al (US 6,717,114**).

29. **In re claims 8 and 9**, Goff et al ('459) discloses an oven (fig 2; (1)) wherein the fan cladding (4) which comprises a surface that is placed at the back of the cooking chamber (2) and in front of the fan (17)

30. Goff et al ('459) lacks wherein the sides surrounding this surface and recess that is formed by deep drawing the part that faces the sweeping surface of the fan and a recess edge with a twisted form narrowing from surface towards the base between the surface and the base, and that the recess edge has across-sectional view of an "S" shape.

31. Austin et al ('114) teaches wherein the sides (fig 3; (138)) surrounding this surface and recess (142) that is formed by deep drawing the part that faces the sweeping surface of the fan (12) and a recess edge (shown below in fig 3) with a twisted form narrowing from surface (140) towards the base (135) between the surface (140) and the base (135), and that the recess edge (in figure 3, indicated as (110)) has across-sectional view of an "S" shape (and as shown below).

32. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a fan cladding wherein the sides surround a surface and recess that is formed by deep drawing the part that faces the sweeping surface of the fan, and a recess edge with a twisted form narrowing from surface towards the base between the surface and the base, with a cross sectional "s" shape, as taught by Austin et al ('114) in the oven of Goff et al ('459) for the purpose of enhancing the efficiency of the air flow, to reduce operating costs.



Austin et al ('114): Figure 3 (partial)

33. **In re claim 11**, Goff et al ('459) discloses an oven (fig 2; (1)) wherein the fan cladding (4) opens towards the cooking chamber (2) over the surface (4) and comprises one or more than one blowing aperture (14a)

34. Goff et al ('459) lacks wherein the fan cladding includes a recess (see above, Claim 8)

35. Austin et al ('114) teaches a centrally located recess in the fan cladding. With the teaching of Austin et al ('114) in the oven of Goff et al ('459), the blowing apertures would be located on both sides of the recess.

36. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a centrally located recess in the fan cladding as taught by Austin et al ('114) in the oven of Goff et al ('459) for the purpose of providing a cooking system with diffuse heat supply, by providing peripheral blowing/supply apertures and a centrally located suction/return recess, for the purpose of enhancing the efficiency of the air flow, and to equalize the temperature of the chamber for improved cooking conditions.

37. **In re claim 12**, the oven of Goff et al ('459)/ Baldan ('524)/ Austin et al ('114) was discussed above in Claim 8, but lacks wherein the fan cladding comprises an arc which suits the structure of the recess to the sides in order to direct air towards both side walls in equal proportions and one or more side which is the form of a butterfly and that have an incline increasing towards the sides, connecting both sides of the arc.

38. However, it would have been a matter of design choice to include a fan cladding that suits the structure of the recess, the fan, the fan housing and plenum, so that the air is equally and efficiently directed to the sides of the cooking chamber, where the supply apertures are located. As examples of this teaching:

- Andres (DE 19831087) discloses wherein (figs 1 - 3) airfoils and air deflector panels house the fan such that regions of turbulent and laminar air flow are generated, as air is forced equally to the lateral sides of the cooking chamber. Andres ('087) also teaches wherein the dimension of the housing/cladding increases as it moves from the fan, towards the sidewalls of the housing, similar to the structure claimed by the Applicant
- Husslein et al (US 4,467,522) discloses wherein (fig 1, 4) the fan is surrounded by guide baffles to improve air flow, and to assure a flow from behind the baffle-wall in the direction toward the apertures in the lateral sides of the cooking chamber.
- Tallman et al (US 6,084,214) discloses wherein (figs 5, 6, 7, 13) a fan housing design can be adjusted through the use of baffles to manipulate and adjust the air velocity and pressure zones to control air delivery.

39. Andres ('087), Husslein et al ('522) and Tallman et al ('314) all discloses a fan cladding that directs air towards both side walls in equal proportions. Goff et al ('459)/ Baldan ('524)/ Austin et al ('114) in view of either Andres ('087), Husslein et al ('522) or Tallman et al ('314) disclose the applicant's invention substantially as claimed with the exception of the "butterfly" shape. It would have been an obvious matter of design choice to modify the shape of the fan cladding of Goff et al ('459)/ Baldan ('524)/ Austin et al ('114) to provide a symmetrical air discharge towards the side walls, since Applicant has not disclosed that the "butterfly" shape solves any stated problem in a

new or unexpected way, or is for any particular purpose that is unobvious to one of ordinary skill and it appears that the claimed feature does not distinguish the invention over similar features in the prior art, since the shape of any of the cited fan claddings will perform the invention as claimed by the applicant..

40. **In re claim 13**, Goff et al ('459) discloses an oven (fig 2; (1)) wherein a fan cladding (4) that comprises side (shown in fig 3: portion of cladding where openings (14a)) are located) having one or more opening (14a) on and that enables the inlet (shown in figure 2, above) to open towards the volume (13) where the fan (17) is located.

41. **In re claim 16**, the oven of Goff et al ('459)/ Baldan ('524)/ Austin et al ('114) has been discussed, wherein Baldan ('524) discloses one or more heater (Baldan ('524) discloses two heaters: (13)) equal or different power rates that is located in front of (the heater is "in line" of the airflow path; refer to fig 1) the openings (12) formed on the sides (19) of the fan cladding (which is the rear wall of casing (19)) in order to transfer air having different temperature rates (as selected by the operator) inside the cooking chamber (6) when more than one plate (7) is desired to be heated at different temperature rates (as selected by the operator).

42. **In re claim 18**, the oven of Goff et al ('459)/ Baldan ('524)/ Austin et al ('114) has been discussed, wherein Baldan ('524) discloses heater (13) with equal or different power rates that are located inside one or more duct (10) placing on the side wall. Please note that Baldan ('524) further discloses :

- "Each delivery chamber (10) houses heater means (13) disposed at symmetric locations and comprising, for instance, a plurality of electric heater elements" (col 2, lns 30 - 33.
- Furthermore, Baldan ('524) discloses that the heater means may be disposed at any other location within the path of the forced air flow. (col 3, lns 50 – 52)

43. **Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goff et al (GB 2,105,459) in view of Baldan (EP 0 611 524) and Austin et al (US 6,717,114), as applied to claim 8 above, and in further view of Pagani (GB 2,226,400)**

44. **In re claim 10**, Goff et al ('459) discloses an oven (fig 2; (1)) wherein the fan cladding (4) comprises a single or multiple suction apertures (16) in the middle of the recess (the rear wall area that is stepped back, from the rear cooking chamber wall where the apertures (14a) are located), covering the sweeping area of the fan (17), preferably with a circular cross- section (as shown in fig 3) and providing air suction by the fan (17) inside the cooking chamber (2).

45. Goff et al ('459) lacks wherein the apertures are various dimension and shapes

46. Pagani (GB '400) teaches the apertures(fig 3, (3)) are various dimension and shapes

47. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include apertures of various dimensions and shapes as taught by Pagani (GB '400) in the oven of Goff et al ('459)/ Baldan ('524)/ Austin et al ('114) for the purpose of equalizing the suction pressure across the face of the fan, for the purpose of enhancing the efficiency of the air flow, to reduce operating costs.

Allowable Subject Matter

48. Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

49. Claims 15 and 17 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

50. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Polin (US 5,615,603) discloses a Baking oven wherein a plurality of cooking surfaces are heated by hot air flow, where measurement and adjustment means enable control of the air temperature

- Tamada et al (US 3,710,775) discloses a Hot air baking oven wherein inside plates are provided with receiving tabs for supporting cooking pans, and ventilation holes are produced in the plate to enable hot air to heat the chamber
- Carbonne et al (US 6,943,321) discloses a Convection oven wherein the heating elements are interfaced with the blowers to create at least two zones, and various cooking modes.

51. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANCES KAMPS whose telephone number is 571.270.5726. The examiner can normally be reached on M-F; 8-5.

52. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Rinehart can be reached on 571.272.4881. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

53. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866.217.9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800.786.9199 (IN USA OR CANADA) or 571.272.1000.

/FRANCES KAMPS/
Examiner, Art Unit 3743

/Kenneth B Rinehart/
Supervisory Patent Examiner, Art Unit 3743